AGNICO EAGLE
MELIADINE

MELIADINE DIVISION

Final Report for Spill on October 4, 2016

GN Spill No. 2016368

November 14, 2016

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SECTION 1 • BACKGROUND

On Tuesday, October 4 at approximately 02:20, the operator for the diesel refueling truck was re-supplying the fuel truck tanker, Agnico unit # 65TRK01, with diesel fuel from the tank farm.

The operator climbed to the top of the fuel truck tank, opened the relief hatch and performed a visual estimate of the fuel level inside. He then proceeded to the 80,000L supply tank and utilized the dip tube to obtain a fuel level, the results of which were recorded in the log book. The operator then made a 2" hose connection with the supply tank via the cam-lock connection on the driver's side, started the on-board suction pump, opened the truck supply valve, confirmed diesel fuel flow and then climbed back into the fuel truck cab. The operator later reported that he was cold and was not dressed appropriately for the weather conditions. Approximately 2-3 minutes later the operator noticed diesel fuel flowing onto the ground from the refueling truck's relief hatch. He immediately stopped the on-board pump and closed the ball valve connection.

He then notified his supervisor who responded to the spill location and began organizing containment, isolation and initial soil removal/ remediation of the spill under the direction and guidance of the on-site AEM environmental group.

The re-fueling truck involved in this incident is on loan to MTKSL from Agnico Eagle. Approximately 1200L of diesel fuel contaminated the immediate area and migrated towards the adjacent tundra to various depths.

This spill was reported as required by the conditions under the Nunavut Water Board License 2BB-MEL1424, Part H, item 4 (b) pursuant to subsection 12(3) of the Nunavut Waters and Nunavut Surface Rights Tribunal Act.

This spill was also reported as required by the Government of Nunavut's, Environmental Protection Act, paragraph 5.1(a).

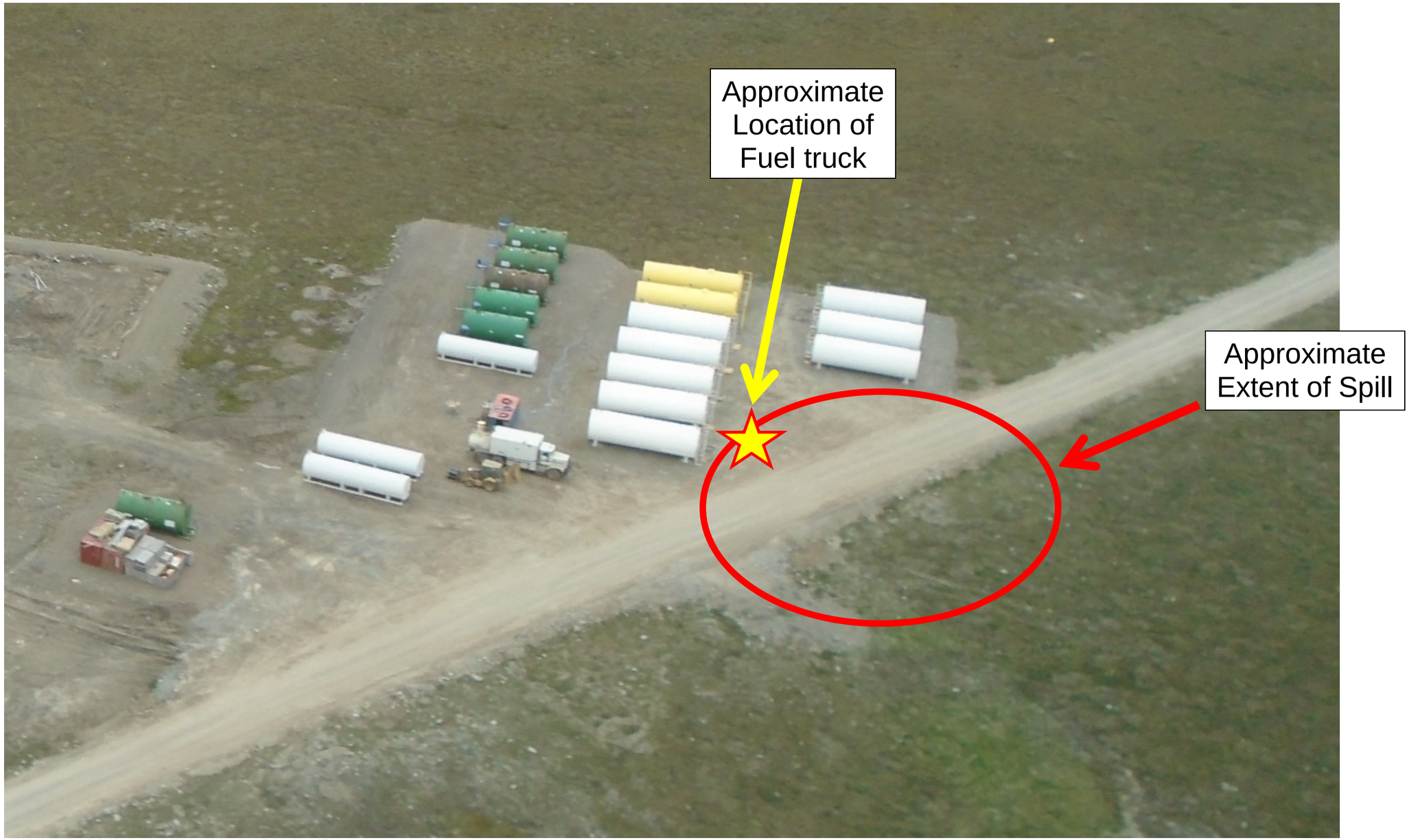


Figure 1 - Aerial View of Spill Location and Fuel Spill Extent

SECTION 2 • IMMEDIATE ACTION

2.1 **TIME LINE –**

October 4

2h30: First responder Oliver Saulnier (night shift foreman) and Tyson Boshman obtained a spill kit and accessed the situation.

2h40 to 2h50: Oliver Saulnier went to wake up Greg Smith (Nuna superintendent) and Alexandre Gauthier (AEM Environmental Technician).

3h10: Assessment of the situation and planning of the remediation activities were carried out by Greg Smith and Alexandre Gauthier.

3h30: Hazmat response material was deployed, by the environmental technician and Nuna/KSL team (5 workers); absorbent booms, absorbent matting, absorbent pillows and Quatrex bags.

3h35: A trench was dug by an excavator operator and booms were deployed at the toe of the pad beside the road.

4h30: The exterior of the fuel truck was cleaned using absorbent matting and was then removed from the area.

4h35: The first 6 inches of soil near the immediate spill area was excised/scraped by an excavator.

5h35: Night shift crew change.

6h30: Excavation continued.

8h00: A trench was dug on the tundra adjacent to the spill area and 3 spots were found to be contaminated with fuel.

9h30 to 14h00: Contaminated soil was excavated from the tundra adjacent to the roadway near the spill area.

Figure 2 - First Spill Response

Figure 3 - Morning scraping of contaminated area

Figure 4 – Contaminated soil on the roadway

Figure 5 - Tundra trench - 3 spots found to be contaminated

Figure 6 – Contaminated soil excavation

Figure 7 - All contaminated soil removed from the trench up to the road shoulder

October 5 - 9, 2016

Investigations began for the fuel spill; both by the contracting company involved and also by Agnico Eagle personnel. Interviews were conducted and statements were taken. The final investigation reports can be found in Appendix A.

Nuna Test Pit

Excavations continued to remove any contaminated soil. At the location of the spill an area labelled as “Nuna Test Pit” was dug in order to determine the depth of the spill migration. At the extents of this pit, a composite sample was collected in order to determine if any contaminants had migrated below the depth that had been excavated.

Figure 8 - Nuna Test Pit

No contaminants above Industrial CCME Guideline for surface soils, were found to be outside the excavation, see Table 1 for laboratory analysis results of the collected samples.

TRENCH

The trench that was excavated was also sampled to ensure that the excavated material included the extent of the spill plume. Soils along the edges of the trench were tested with a MiniRAE Lite handheld Volitile Organic Compound (VOC) tester. Any locations that appeared to have elevated levels of VOCs were further excavated until hydrocarbons were no longer detected.

Figure 9 - MiniRAE Lite VOC Gas Monitor

After all readings were found to be negative for VOC's, 4 composite samples were collected on each edge of the trench for laboratory submission. The results for these can be found in Table 1 and are labelled *Nuna Test Trench*, *Nuna Test Pit*, *Nuna Trench 1*, *Nuna Trench 2*, *Nuna Trench 3*. The GPS coordinates for the collected samples are also located in Table 1.

Figure 10 - Location of samples collected - referenced on Google Earth

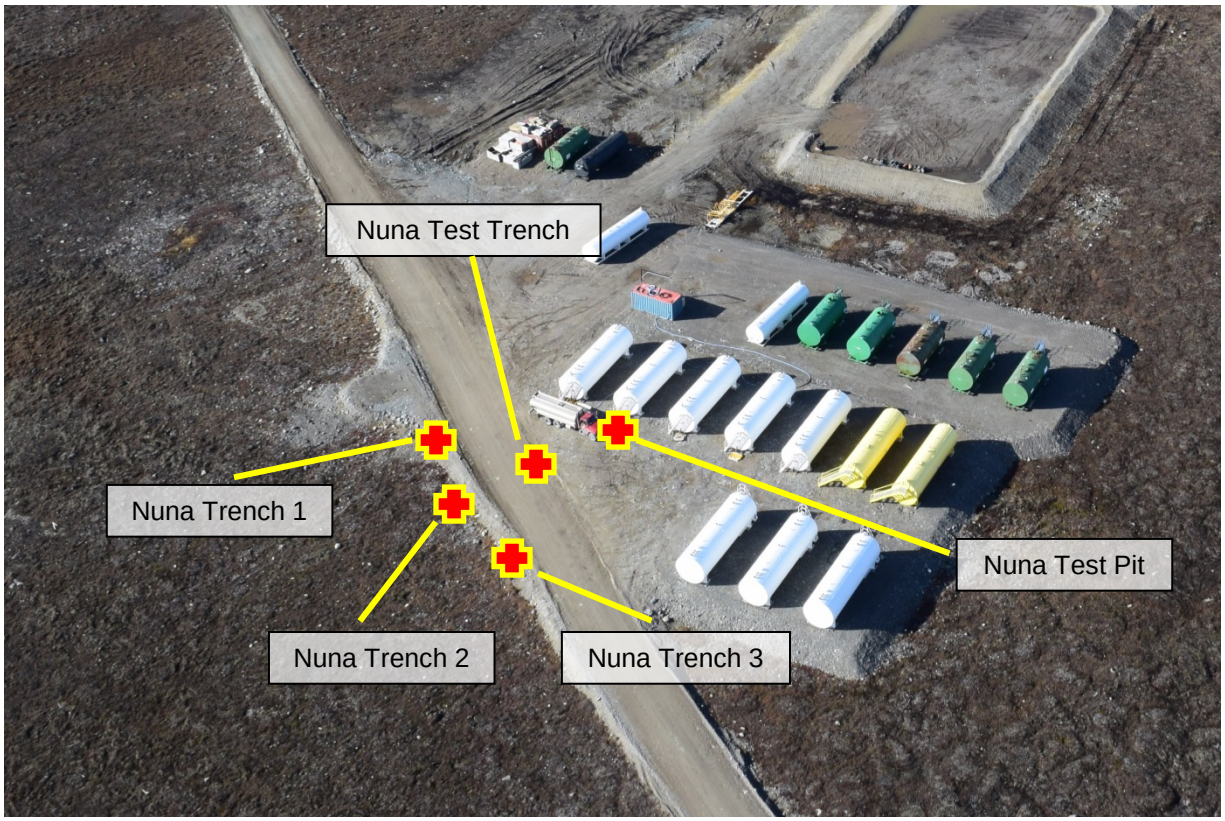


Figure 11 – Approximation of sample locations on aerial photo

Figure 12 - Nuna Test Trench

Figure 13 - Nuna Trench 1, 2, & 3 Locations

Bypass

A bypass road was constructed to get around the excavation area. This bypass road will be the main access to the Exploration camp until backfilling of the trench is approved.

Figure 14 - Bypass looking South/West

Figure 15 - Trench between spill area and bypass road

Figure 16 - Bypass looking North/East

SECTION 3 • CLEAN-UP RESULTS AND CONCLUSION

Upon completion of the remediation activities, this spill created a total of ~225 m3 of contaminated soil which was removed from the spill area and moved to the Type B Landfarm for remediation.

Soil samples were submitted to MAXXAM Analytics in Ottawa for analysis. In Appendix B you will find the Analysis Certificates. Table 1 depicts the results and GPS locations of the samples that were collected.

All sample results were returned meeting the Industrial CCME Guideline for surface soils.

Conclusion

Agnico Eagle believes all remediation efforts meet all applicable remediation guidelines and would like to close GN Spill No: 2016368. Agnico Eagle will be looking to backfill the excavated area with quarry material as soon as all Governing bodies deem this spill to be sufficiently remediated and the incident closed out.

Table 1 - Soil Sample Results and GPS Coordinates

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		DFM538	DFM539	DFM540	DFM541	DFM542		
Sampling Date		2016/10/09 16:30	2016/10/09 16:38	2016/10/09 16:47	2016/10/09 16:17	2016/10/09 16:24		
GPS Coordinates (Northing-Easting)		541229-6988439	541237-6988437	541250-6988439	541226-6988482	541236-6988445		
	UNITS	**NUNA TRENCH-1**	**NUNA TRENCH-2**	**NUNA TRENCH-3**	**NUNA TEST PIT**	**NUNA TEST TRENCH**	**RDL**	**QC Batch**
BTEX & F1 Hydrocarbons								
Benzene	ug/g	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	4702195
Toluene	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	4702195
Ethylbenzene	ug/g	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	4702195
o-Xylene	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	4702195
p+m-Xylene	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	4702195
Total Xylenes	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	4702195
F1 (C6-C10)	ug/g	<10	<10	<10	<10	<10	10	4702195
F1 (C6-C10) - BTEX	ug/g	<10	<10	<10	<10	<10	10	4702195
F2-F4 Hydrocarbons								
F2 (C10-C16 Hydrocarbons)	ug/g	<10	<10	<10	<10	<10	10	4699380
F3 (C16-C34 Hydrocarbons)	ug/g	<50	<50	<50	120	<50	50	4699380
F4 (C34-C50 Hydrocarbons)	ug/g	<50	<50	<50	<50	<50	50	4699380
Reached Baseline at C50	ug/g	Yes	Yes	Yes	Yes	Yes		4699380
Surrogate Recovery (%)								
1,4-Difluorobenzene	%	91	90	91	90	94		4702195
4-Bromofluorobenzene	%	110	102	105	106	101		4702195
D10-Ethylbenzene	%	89	92	86	84	90		4702195
D4-1,2-Dichloroethane	%	98	97	100	101	102		4702195
o-Terphenyl	%	101	103	103	101	104		4699380

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Table 2 - Industrial CCME Guideline for surface soils

Table 1. Summary of Tier 1 Levels (mg/kg) for surface soil.*

Land Use	Soil Texture	Fraction 1	Fraction 2	Fraction 3	Fraction 4
Agricultural	Coarse-grained soil	30[b]	150	300	2800
	Fine-grained soil	210 (170[a])	150	1300	5600
Residential/ Parkland	Coarse-grained soil	30[b]	150	300	2800
	Fine-grained soil	210 (170[a])	150	1300	5600
Commercial	Coarse-grained soil	320 (240[a])	260	1700	3300
	Fine-grained soil	320 (170[a])	260 (230[a])	2500	6600
Industrial	Coarse-grained soil	320 (240[a])	260	1700	3300
	Fine-grained soil	320 (170[a])	260 (230[a])	2500	6600

Appendix A – Investigation Reports

AGNICO EAGLE
MEL1ADINE

Accident/Incident Investigation Form

PERSON AND TIME

Name: Johnny Tassiuk Employee #: XXX

Department: Construction Work station: Fueling supplying/Tank Farm area

Supervisor: Olivier Sonier Witness: XXX

Date: October 4 2016 Time: +/-2:20 AM Overtime: ☐ Yes ☒ No

Shift: ☐ 8H ☐ 10H ☒ 12H ☐ Day ☒ Night

Supplementary details in the statement (if applicable) ☒
Appendix

Witness statements (if any):
None

TASK & ORGANIZATION

Task at the time of the accident: Re-supplying the fuel truck tanker, Agnico unit # 65TRK01

Experience in this task: 1 week Frequency of this task: Daily

Movement at the time of the accident:
Static/Not moving

Body position: Sitting upright inside the fuel truck cabin

Type of work: ☐ Team ☒ Solo

Is there a written work procedure: ☐ Yes ☒ No ☐ N/A

Was it followed: ☐ Yes ☐ No ☒ N/A

Training received for this task: ☒ Yes ☐ No Date: Sept. 15, 2016 Length: 1.5 hr.

Information received for this task: ☐ Yes ☐ No Date: Oct. 4th, 2016 Length: 5 min.

LOCATION AND ENVIRONMENT

Exact location of the accident: Tank Farm area

Layout and cleanliness of the site:
Compliant

Physical condition of the site (ground conditions, ventilation, temperature, lighting, dust, etc.):

☐ Compliant ☒ Non-Compliant ☐ N/A

Details (if non-compliant):
Tank Farm truck out area has no containment/liner.

1/

Photo: ☒ Yes ☐ No

EQUIPMENT, MATERIALS AND TOOLS

Identify equipment, materials or tools involved in the accident (if any):
AEM Unit # 65TRK01

Condition of equipment, materials or tools:

☒ Compliant ☐ Non-Compliant ☐ N/A

Details (if non-compliant):

Is there an equipment maintenance procedure? ☐ Yes ☒ No ☐ N/A

Date of last preventive maintenance: September 15th, 2016

Personal protective equipment involved (boots, hat, eyewear, mask, visor, gloves…):
Steel toe safety boots, hard hat, safety eyewear, gloves, coat.

Condition of personal protective equipment involved: ☒ Compliant ☐ Non-Compliant ☐ N/A

Details (if non-compliant):

Were they appropriate to the task? ☒ Yes ☐ No ☐ N/A

Details (if non-compliant):

Photo: ☐ Yes ☒ No

ANALYSYS *(Investigation of immediate and fundamental (root) causes)*

Reconstruct the chronological order including the causes and effects of the accident:

Damage or Injury:

Lube/Oil fuel truck over fill caused reportable spill to the ground.

Fact(s):
(Why?)

- Employee wasn't monitoring his fuel tank level.
- No Task Hazard Assessment (THA).
- No written procedure for this specific task.
- Not properly dress for the weather.

Immediate Cause(s):
(Why?)

02 – Improper/lack of communication
08 – Using equipment improperly
13 – Improper position for task
33 – Inadequate or excessive illumination
36 – Procedure does not exist

Fundamental (Root) Causes(s):
(Why?)

62 – Lack of knowledge
71 – Inadequate leadership/supervision

CORRECTIVE MEASURES

Corrective measure # 1
Develop and review with the operators the procedure for the fuel re-supply for re-fueling the fuel truck.

Responsibility: Shane Gano — Due Date: 10/08/2016
Corrective completed ☒ By: Shane Gano — Date: 10/08/2016

Corrective measure # 2
Review with work crews, MTKSL hazards assessment policy that requires completion of FLRA cards at the start of the shift and review throughout the duration of the shift. Also, requires the supervision to review and sign off.

Responsibility: Shane Gano — Due Date: 10/07/2016
Corrective completed ☒ By: Shane Gano — Date: 10/07/2016

Corrective measure # 3
Review training policies and procedures applicable to this incident and complete gap analysis on all the equipment and tools on site.

Responsibility: Shane Gano — Due Date: 10/14/2016
Corrective completed ☒ By: Shane Gano — Date: 10/14/2016

Corrective measure # 4
Review with the employees/supervisors the importance to wear the proper clothing and/or PPE for the weather.

Responsibility: Shane Gano — Due Date: 10/07/2016
Corrective completed ☒ By: Shane Gano — Date: 10/14/2016

Corrective measure # 5
A written procedure will be done for the fuel transfer at the tank farm.

Responsibility: Rejean Falardeau/Marco Lemelin — Due Date: 10/26/2016
Corrective completed ☐ By: — Date:

OHSC Hourly Representative: Justin MacMillan (Signature)

OHSC Management Representative: Yves Chiasson (Signature)

Participant(s):

Rejean Falardeau (As per)
Marco Lemelin
Larry Chabot
Shane Gano,
Mike Price,

Alexandre Gauthier
Lonny Syvret
Jeffrey Pratt

Date: Oct. 2016

The following tables contain a variety of possible causes. However, they should never limit the possibilities of accident causes. These tables are reference tools and should be considered as reminders in the investigation process and analysis.

IMMEDIATE CAUSES	TYPE	CATEGORY
01 – Operating equipment without authority	Immediate	Substandard actions
02 – Improper/lack of communication	Immediate	Substandard actions
03 – Failure to secure/make safe	Immediate	Substandard actions
04 – Operating at improper speed	Immediate	Substandard actions
05 – Making safety devices inoperable	Immediate	Substandard actions
06 – Removing safety devices	Immediate	Substandard actions
07 – Using defective equipment	Immediate	Substandard actions
08 – Using equipment improperly	Immediate	Substandard actions
09 – Failure to use PPE properly	Immediate	Substandard actions
10 – Improper loading	Immediate	Substandard actions
11 – Improper placement	Immediate	Substandard actions
12 – Improper lifting	Immediate	Substandard actions
13 – Improper position for task	Immediate	Substandard actions
14 – Servicing equipment in operation	Immediate	Substandard actions
15 – Horseplay	Immediate	Substandard actions
16 – Inadequate inspection	Immediate	Substandard actions
Other	Immediate	Substandard actions
21 – Inadequate guards or barriers	Immediate	Substandard conditions
22 – inadequate ground support	Immediate	Substandard conditions
23 – inadequate/improper protective equipment	Immediate	Substandard conditions
24 – Defective tools, equipment or materials	Immediate	Substandard conditions
25 – congestion or restricted action	Immediate	Substandard conditions
26 – Inadequate warning system	Immediate	Substandard conditions
27 – Fire and explosion hazards	Immediate	Substandard conditions
28 – Substandard housekeeping	Immediate	Substandard conditions
29 – Hazardous Environment conditions: gases, dust, fumes, vapours, smoke etc.	Immediate	Substandard conditions
30 – Noise exposure	Immediate	Substandard conditions
31 – Radiation exposure	Immediate	Substandard conditions
32 – Temperature exposure	Immediate	Substandard conditions
33 – Inadequate or excessive illumination	Immediate	Substandard conditions
34 – Inadequate ventilation	Immediate	Substandard conditions
35 – Ground rock conditions	Immediate	Substandard conditions
36 – Procedure does not exist	Immediate	Substandard conditions
37 – Personal protective equipment missing	Immediate	Substandard conditions
38 – Failure to warn	Immediate	Substandard conditions
39 – Communication means inadequate (poor communication)	Immediate	Substandard conditions
40 – Instability of the surface, slippery conditions etc.	Immediate	Substandard conditions
Other	Immediate	Substandard conditions

FUNDAMENTAL (ROOT) CAUSES	TYPE	CATEGORY
61 – Inadequate physical/mental capacity	Fundamental	Personal factors
62 – Lack of knowledge	Fundamental	Personal factors
63 – Lack of skill	Fundamental	Personal factors
64 – Stress physical or mental	Fundamental	Personal factors
65 – Improper motivation	Fundamental	Personal factors
66 – Abuse or misuse	Fundamental	Personal factors
Other	Fundamental	Personal factors
71 – Inadequate leadership/supervision	Fundamental	Organizational factors
72 – Inadequate engineering	Fundamental	Organizational factors
73 – Inadequate purchasing	Fundamental	Organizational factors
74 – Inadequate maintenance	Fundamental	Organizational factors
75 – Inadequate tools/equipment	Fundamental	Organizational factors
76 – Inadequate work standards	Fundamental	Organizational factors
77 – Wear and tear	Fundamental	Organizational factors
Other	Fundamental	Organizational factors

AGNICO EAGLE
MELIADINE

Accident/Incident Investigation Form

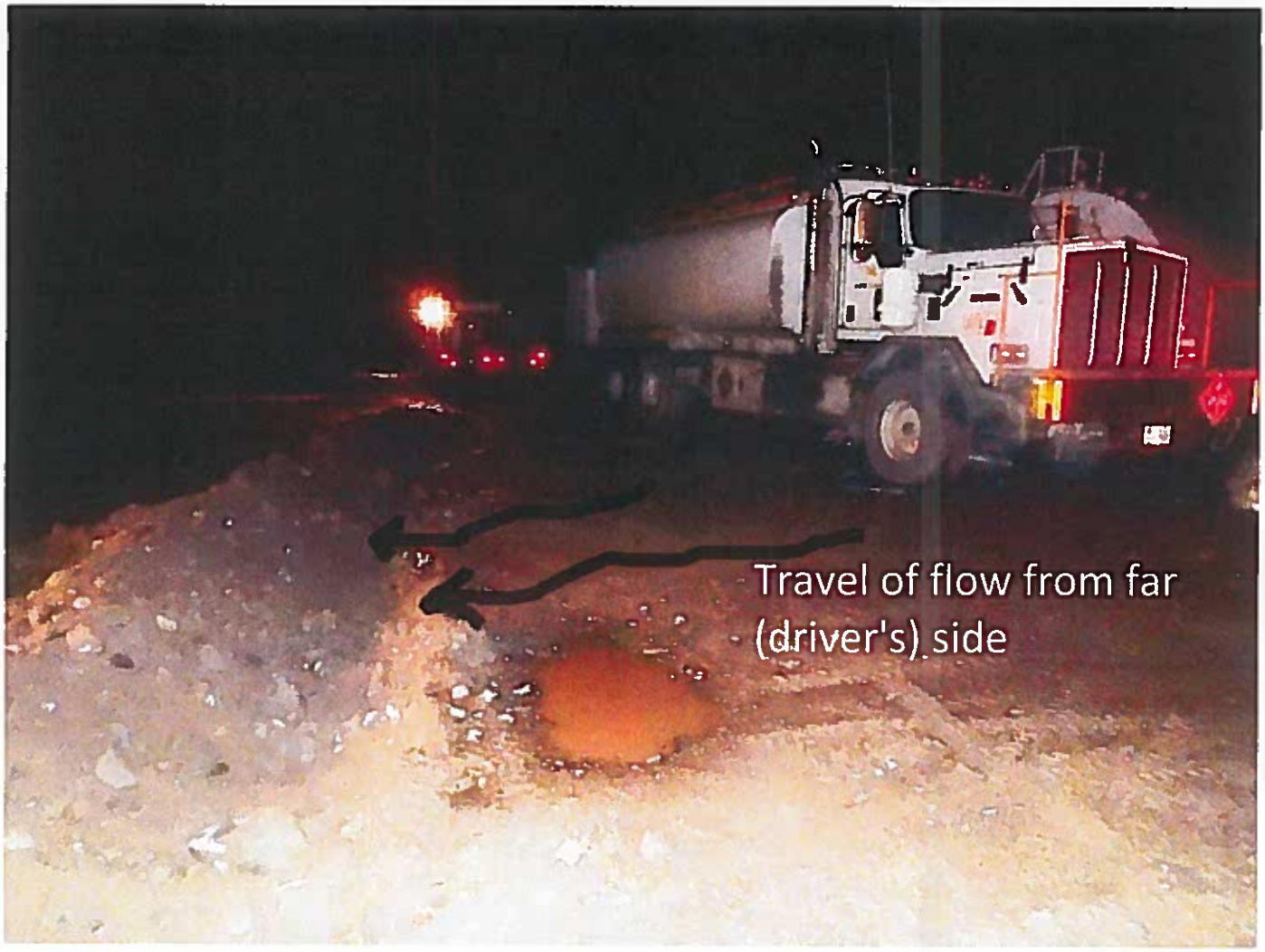
APPENDIX

On Tuesday, October 4 at approximately 02:20, the operator for the diesel refueling truck was re-supplying the fuel truck tanker, Agnico unit # 65TRK01, with diesel fuel from the tank farm. The operator climbed to the top of the fuel truck tank, opened the relief hatch and performed a visual estimate of the fuel level inside. He then proceeded to the 80,000L supply tank and utilized the dip tube to obtain a fuel level the results of which were recorded in the log book. The operator then made a "2 hose connection with the supply tank via the cam-lock connection on the driver's side, started the on board suction pump, opened the truck supply valve, confirmed diesel fuel flow and then climbed back into the operators truck cab. Operator later reported he was cold and not dressed appropriately for the elements. Approximately 2-3 minutes later the operator noticed diesel fuel flowing onto the ground from the refueling truck's relief hatch. He immediately stopped the on board pump and closed the connection ball valve. He then notified his supervisor who responded to the spill location and began organizing containment, isolation and initial soil removal/ remediation of the spill under the direction and guidance of the on-site AEM environmental group.
The re-fueling truck involved in this incident is on loan to MTKSL from Agnico Eagle.
Approximately 1200L of diesel fuel contaminated the immediate area and migrated into standing surface water and adjacent tundra to various depths. As of this report, approximately 225 m3 of contaminated material and soil has been removed.

Note: Agreement between MTKSL and AEM for the use of the fuel truck (7 days a week from 16:00 to 6:00 AM).

DRAWING

	Comments :


Travel of flow from far
(driver's) side


CAT
Directions of flow


Direction of flow

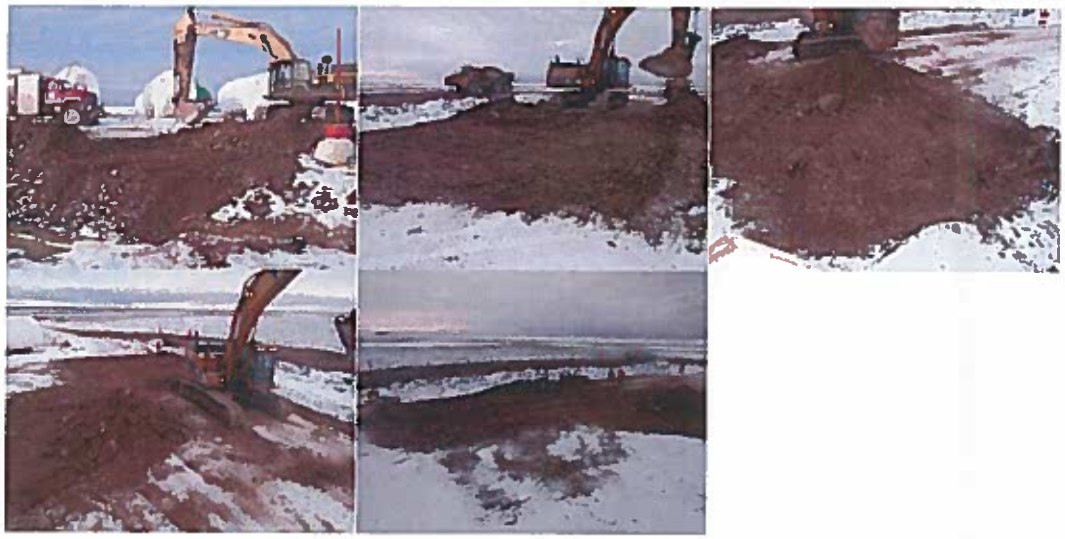

1202

Spill clean-up pic

Oct. 4th

Oct 8th

Bypass road



Oct. 9th

TASK HAZARD ASSESSMENT WORKSHEET

Fuel re-supply of lube fuel truck

MTKSL CONTRACTING JOINT VENTURE

Project / Site Name:	Meliadine
Team Leader:	Shane Gano
Date Created:	October 6, 2016
Date Reviewed:	October 6, 2016
Required Personal Protective Equipment:	Protective Eye Wear / Protective Head Gear / Protective Foot Wear / Protective Hand Wear

List Associated procedures / Work Instructions or Temporary Work Instruction:

STEP	DESCRIBE JOB STEP List the natural steps of the job (not too broad and not to fine)	HAZARDS / POTENTIAL INCIDENTS • What can happen at each step? • Can an employee be struck by • Caught on • Contacted by • Struck against • Contact with • Caught between?	RISK CONTROL METHODS REQUIRED • Describe how defined hazards can be managed or removed. • Consider elimination • Substitution • Engineering Controls • Administrative Controls • Personal Protective Equipment	Likelihood of Occurrence 1 (Rare) 2 (Unlikely) 3 (Possible) 4 (Likely) 5 (Certain)	Consequence 1 (Insignificant) 2 (Minor) 3 (Moderate) 4 (Major) 5 (Catastrophic)	Risk Level
1	Park truck, engage park brake. Place truck in idle.	> uncontrolled movement of equipment may result in serious injury/ equipment damage	properly place wheel chokes (chucks)	1 (Rare)	1 (Insignificant)	(1) Low
2	exit cab, walk to supply tank	> falls from height > low ambient light > uneven ground	> maintain 3 point contact > use artificial light (headlamps, etc) > watch footing stay on established routes of travel	2 (Unlikely)	2 (Minor)	(4) Medium
3	access top of fuel supply tank, take dip measurement and record in log book	falls from height	maintain 3 point contact while climbing storage tank	1 (Rare)	3 (Moderate)	(3) Low
4	make secure connection between truck and supply tank, open valves	> hose connections may pose potential for pinch points > equipment failure leading to spill potential	> ensure hand protection/ gloves are being utilized > use open palm when closing cam lock fittings > ensure spill kit readily available > deploy spill trays at all connections > ensure secure connections	2 (Unlikely)	2 (Minor)	(4) Medium
5	engage PTO and pump, begin fuel transfer	> equipment failure > fire > over fill leading to spill	> ensure fire extinguishers readily available > utilize 2 workers during fuel trasfer > ensure re-fill is no more than 80% of truck tank volume > immediately shut down fuel transfer if left unattended > ensure spill kits readily available	2 (Unlikely)	1 (Insignificant)	(2) Low
6	turn off pump, disengage PTO	> equipment failure leading to over fill spill	> ensure spill kits readily available > utilize 2 workers	3 (Possible)	2 (Minor)	(6) Medium

TASK HAZARD ASSESSMENT WORKSHEET

Fuel re-supply of lube fuel truck

MTKSL CONTRACTING JOINT VENTURE

Project / Site Name:	Melladine
Team Leader:	Shane Gano
Date Created:	October 6, 2016
Date Reviewed:	October 6, 2016
Required Personal Protective Equipment:	Protective Eye Wear / Protective Head Gear / Protective Foot Wear / Protective Hand Wear

List Associated procedures / Work Instructions or Temporary Work Instruction:

STEP	DESCRIBE JOB STEP	HAZARDS / POTENTIAL INCIDENTS	RISK CONTROL METHODS REQURIED	Likelihood of Occurrence	Consequence	Risk Level
7	close valves, disconnect transfer hoses	> splash back of fuel onto workers when disconnecting hoses	> wear all eye/ face protection PPE	1 (Rare)	2 (Minor)	(2) Low
8	access top of fuel supply tank, take dip measurement and record in log book	falls from height	maintain 3 point contact while climbing storage tank	1 (Rare)	3 (Moderate)	(3) Low
9				1 (Rare)	1 (Insignificant)	(1) Low
10				1 (Rare)	1 (Insignificant)	(1) Low
11				1 (Rare)	1 (Insignificant)	(1) Low
12				1 (Rare)	1 (Insignificant)	(1) Low
13				1 (Rare)	1 (Insignificant)	(1) Low

TASK HAZARD ASSESSMENT WORKSHEET

Fuel re-supply of lube fuel truck

MTKSL CONTRACTING JOINT VENTURE

Project / Site Name:	Meliadine
Team Leader:	Shane Gano
Date Created:	October 6, 2016
Date Reviewed:	October 6, 2016
Required Personal Protective Equipment:	Protective Eye Wear / Protective Head Gear / Protective Foot Wear / Protective Hand Wear

List Associated procedures / Work Instructions or Temporary Work Instruction:

STEP	DESCRIBE JOB STEP	HAZARDS / POTENTIAL INCIDENTS	RISK CONTROL METHODS REQURIED	Likelihood of Occurrence	Consequence	Risk Level

Leader's Name (Please Print)	Leader's Signature
MATT GALLANT Shane Gano	

Team Member(s) Name (Please Print)	Team Member(s) Signature
LOGAN SHANTRY	
Keith WAterman	

TASK HAZARD ASSESSMENT WORKSHEET

Fuel re-supply of lube fuel truck

MTKSL CONTRACTING JOINT VENTURE

Project / Site Name:	Meliadine
Team Leader:	Shane Gano
Date Created:	October 6, 2016
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Required Personal Protective Equipment:	Protective Eye Wear / Protective Head Gear / Protective Foot Wear / Protective Hand Wear

List Associated procedures / Work Instructions or Temporary Work Instruction:

STEP	DESCRIBE JOB STEP	HAZARDS / POTENTIAL INCIDENTS	RISK CONTROL METHODS REQURIED	Likelihood of Occurrence	Consequence	Risk Level

TASK HAZARD ASSESSMENT WORKSHEET

Fuel re-supply of lube fuel truck

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STEP	DESCRIBE JOB STEP	HAZARDS / POTENTIAL INCIDENTS	RISK CONTROL METHODS REQURIED	Likelihood of Occurrence	Consequence	Risk Level

NUNA Group of Companies

RISK ASSESSMENT MATRIX

Likelihood	Insignificant 1	Minor 2	Moderate 3	Major 4	Catastrophic 5
5 (Certain)	5				
4 (Likely)	4				
3 (Possible)	3	5			
2 (Unlikely)	2	4	6		
1 (Rare)	1	2	3	4	5

Low (1 - 3) Medium (4 - 6)

LIKELIHOOD DEFINITIONS

Certain	Event is a common or frequent occurrence (daily)
Likely	Event is expected to, or has occurred under some conditions (monthly)
Possible	Event will probably occur, or has occurred, under some conditions (yearly)
Unlikely	Event could occur at some time, or has happened elsewhere (every 10 years or so)
Rare	Event is not expected to occur, but may under exceptional circumstances

RISK	CORRECTIVE ACTION & CONTROLS
Low	Measurable and adequate controls are set and audited within 3 months for effectiveness
Moderate	Measurable and adequate controls are set and audited within 2 months for effectiveness
High	Measurable and adequate controls are set and audited within 1 month for effectiveness
Extreme	Measurable and adequate controls are set and audited continually for effectiveness

Consequences					
Likelihood	Safety	Occupational Health	Environmental	External / Community Relations	Damage/Loss
Insignificant	First-aid treated injury	Exposure to health hazard resulting in temporary discomfort	No or very low impact. Impact confined to small area	Isolated complaint. No media inquiry. No Community reaction	> $1,000
Minor	Medical treatment, restricted work injury	Exposure to health hazard resulting in temporary alterations / limitations (no lost time)	Low impact. Rapid cleanup by site staff and/or contractors. Impact contained to operations area	Small number of sporadic complaints. Local media inquiries. Some Community interest	> $10,000
Moderate	Single lost time injury	Exposure to health hazards/ agents resulting in reversible impact on health (with lost time)	Moderate impact, cleanup by site staff and/or contractors. Impact confined within property boundary	Serious / rate of complaints / repeated complaints. Increased local media interest w/ signs of national interest. Some Community concern	> $100,000
Major	Multiple lost-time injuries. Admission to intensive care or equivalent. Serious, chronic, long-term effects	Exposure to health hazards/ agents resulting in irreversible impact on health with loss of quality of life	Major impact. Considerable cleanup using site and external resources. Impact may extend beyond property boundary	Increasing rate of complaints / repeated complaints. Increased local / national media interest. Organized Community concern and/or action	> $1,000,000
Catastrophic	Fatality or permanent disability	Exposure to health hazards/agents resulting in irreversible impact on health with loss of quality of life or fatality	Severe impact. Local species destruction and likely long recovery period. Extensive cleanup w/ external resources. Impact on regional scale	High level of concern or interest from local community. National and/or international media interest. Organized NGO action. Aggressive community action	> $10,000,000

TASK HAZARD ASSESSMENT WORKSHEET

MTKSL CONTRACTING JOINT VENTURE

Fuel-Lube Truck Operations (Equipment Servicing Vehicles)

Facility / Job Site:	AEM-Meliadine
Department:	Construction
Team Leader:	
Date Created:	~~August,30~~,2016
Date Reviewed:	
Crew:	Day and Night Shift – Fuel Lube truck Operators
Required Personal Protective Equipment:	Protective Eye Wear / Protective Head Gear / Protective Foot Wear / Protective Hand Wear

List Associated procedures / Work Instructions or Temporary Work Instruction:

STEP	DESCRIBE JOB STEP List the natural steps of the job (not too broad and not to fine)	HAZARDS / POTENTIAL INCIDENTS • What can happen at each step? • Can an employee be struck by • Caught on • Contacted by • Struck against • Contact with • Caught between?	RISK CONTROL METHODS REQUIRED • Describe how defined hazards can be managed or removed. • Consider elimination • Substitution • Engineering Controls • Administrative Controls • Personal Protective Equipment
1	• Pre-Post and Intermittent Inspection of Fuel-Lube Truck	• Weather Conditions • Wildlife • Congested work areas • Un Planned movement of Fuel-Lube Truck • Fire • Fatigue	• Dress for the conditions, Prepare for changes in weather. • Conduct scene survey, Note surroundings including Wildlife if any in the area. • Park Fuel-Lube truck in area that is not congested, has appropriate light and on flat level surface. Turn off ignition and de energize prior to conducting inspection of engine components. • Use wheel chocks to secure unit from Un planned movement when leaving the operators compartment • Conduct inspection of fire extinguishers and fire suppression system. Note and report any defects to supervisor. • Get proper rest, Use stretch and flex as well as take micro breaks if required. • Wear all required PPE including high visibility

		• Traffic • Communication Failure • Equipment Failure	posted signage regarding road travel. • Have spill Kit readily available. Clean and report all spills as required-(Site Specific)
4	• Fueling and Lube Of Power Mobile Equipment	• Communication Failure • Approaching Power Mobile Equipment- Blind Spots • Un Planned movement of equipment • Splash back of Fuel/Lubricant • Uneven/Slippery Ground Conditions • • Spill or overflow-Contamination of ground material.	• Communicate with equipment operators of intentions and give directions on where equipment is to be staged for fueling. If Equipment to be fueled is unmanned and is in a suitable location for fueling proceed to fuel. If equipment is not in a suitable area do not proceed. Move equipment to suitable location ONLY if trained to do so. • Approach equipment slowly, Do not rush task, Conduct a scene survey and drive to the conditions. • Park in a suitable location. If light conditions are Poor Park near an artificial light source (light plant) Do not stage Fuel Lube truck in PME operators blind spots. PME should always travel to staged Fuel Lube truck for re fueling and Lube. • Properly place wheel chocks to prevent Un Planned movement of PME. • Wear all required PPE including proper EYE /FACE PROTECTION. • Have spill kit readily available for use if spill occurs, Remember to clean up spill immediately, Contact Supervisor and discard of contaminated materials only in approved location. Do not leave fuel nozzle unattended

AGNICO EAGLE

Work Order

Unit Number	65TRK01

Order Number	1475626

Equipment Description:

FUEL TRUCK
KENWORTH C500 TANKER

Location: .

Estimates:
Est. Hours: 3.00
Estimated Downtime Hours: 3.00

People :
Crew: 65100 Team General Services Meliadin
Lead Craft: Mechanic
Supervisor:
Assigned To: 100315 Veillette, Gérald
Requester:
Originator: 78639 Villeneuve, Stephanie
Inventory Item Number: 199174

Description: MONTHLY GREASE AND INSPECT GREASE AND INSPECT PREVENTIVE MAINTENANCE

Order Type : WM
Type: 6 PREVENTIVE MAINTENANCE WO
Priority: 3 PLANNED
Status: 95 WO Closed

Parent W.O. No: 01475626
Business Unit: 6534620
Subsidiary:

Dates :
Order Date: 2016-09-08
Requested Finish Date:
Planned Start Date: 2016-09-15
Planned Finish Date: 2016-09-15

Actual Start Date :

Start time :

Work to be done

CHECK LUBE AND COOLANT LEVELS:
- TRANSMISSION
- ENGINE
- REAR DIFFERENTIAL
- FRONT DIFFERENTIAL
- POWER STERING
*
- COOLANT
*
- OTHER
*
GREASE AS REQUESTED
*
CHECK FOR LEAKS
*
COMMENTS
*
*
*
*
****
-GERALD VEILLETTE 9/15/2016 4841 HRS
-I CHECK ALL, GREASE
-JOB DONE
****

Work Done

Actual Finish Date	Employee	Downtime

AGNICO EAGLE

Work Order

Unit Number	65TRK01

Order Number	1455771

Equipment Description:
FUEL TRUCK
KENWORTH C500 TANKER

Location: .

Estimates:
Est. Hours: 8.00
Estimated Downtime Hours: 8.00

People :
Crew: 65100 Team General Services Meliadin
Lead Craft: Mechanic
Supervisor:
Assigned To: 97333 Carrière, Guy
Requester: 100605 Banville, Alexandre
Originator: 100605 Banville, Alexandre
Inventory Item Number: 213817

Description: 6 MONTH PREVENTIVE MAINTENANCE
6 MONTHS PREVENTIVE MAINTENANCE

Order Type : WM
Type: 6 PREVENTIVE MAINTENANCE WO
Priority: 3 PLANNED
Status: 95 WO Closed

Parent W.O. No: 01455771
Business Unit: 6534620
Subsidiary:

Dates :
Order Date: 2016-08-07
Requested Finish Date:
Planned Start Date: 2016-08-15
Planned Finish Date: 2016-08-15

Actual Start Date :

Start time :

Work to be done

FILL OUT CHECKLIST.

TYPE OF FILTER FILTER
AIR FILTER AF348M
OIL FILTER LF9080
FUEL FILTER FF5686
ELEMENT FILTER BREATHER CV50617
FUEL WATER SEPARATOR K371004
TRANSMISSION FILTER 29548988
POWER STEERING FILTER P550637

GUY CARRIERE N25-08-2016 4667 HRES 9295 KLMS *

I DIDN.T CHANGE OIL BECAUSE IS NOT DU (127 hres)CHECK AIR FILTER AND CLEAN DUST COMPARTMENT GRAESE AND CHECK ALL FLUIDE LEVEL AND LIGHTS ETC REEFER TO CHECK LIST ...

****

Work Done

Actual Finish Date	Employee	Downtime
End Time		

AGNICO EAGLE

Work Order

9285 Kms

Unit Number	65TRK01

4667 Hrs

Order Number	1455771

Equipment Description:
FUEL TRUCK
KENWORTH C500 TANKER

Location:

Estimates:
Est. Hours: 8.00
Estimated Downtime Hours: 8.00

People :
Crew: 65100 Team General Services Meliadin
Lead Craft: Mechanic
Supervisor:
Assigned To:
Requester: 100605 Banville, Alexandre
Originator: 100605 Banville, Alexandre
Item Number: 213817

Description: 6 MONTH PREVENTIVE MAINTENANCE
6 MONTHS PREVENTIVE MAINTENANCE

Order Type : WM
Type: 6 PREVENTIVE MAINTENANCE WO
Priority: 3 PLANNED
Status: 70 In Execution

Parent W.O. No: 01455771
Business Unit: 6534620
Subsidiary:

Dates :
Order Date: 2016-08-07
Requested Finish Date:
Planned Start Date: 2016-08-15
Planned Finish Date: 2016-08-15
Actual Start Date : 24-8-2016
Start time :

Work to be done

FILL OUT CHECKLIST.

TYPE OF FILTER FILTER
AIR FILTER AF348M
OIL FILTER LF9080
FUEL FILTER FF5686
ELEMENT FILTER BREATHER CV50617
FUEL WATER SEPARATOR K371004
TRANSMISSION FILTER 29548988
POWER STEERING FILTER P550637

4667 Hrs

Done

Work Done

Actual Finish Date	Employee	Downtime
End Time		

AGNICO EAGLE

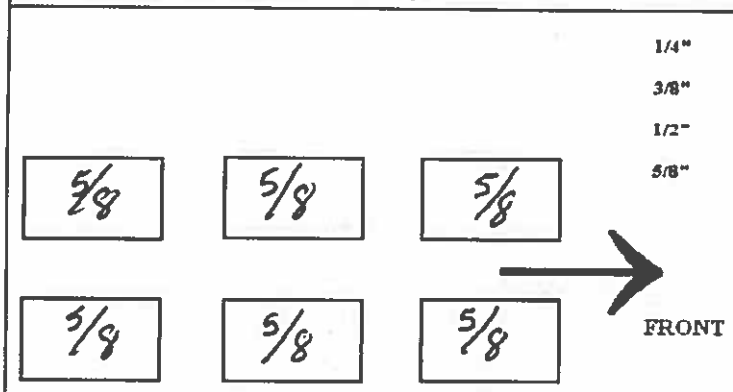
PREVENTIVE MAINTENANCE

TRUCK - 6 MONTHS PM

NAME: Guy Carrière UNIT: TRK-01

DATE: 24-8-2016 HOURS: 4667

TASK	STATUS
CAB INTERIOR INSPECTION	
Review Latest Pre-Op. Inspection Checklist (Book in the Cab)	OK
Turn key on - Check for fault codes, record	OK
Start engine - Observe instrument operation	OK
Apply and release brakes 10 times	OK
Check A/C System	OK
Check low air warning buzzer and light	OK
Check that dash parking brake valves pop out at 35 psi	OK
Check clutch pedal free travel	N/A
Check clutch brake operation	N/A
Check transmission hi-low splitter or two-speed axle controls	N/A
Check clutch and/or neutral safety switch	OK
Check HVAC defrosters, air vents, fan speed and controls	OK
Check HVAC duct temperature, record	OK
Check windshield wipers and washers	OK
Check horns, electric and air	OK
Check interior lights, turn indicators and dash lights	OK
Check door windows and mirror controls	OK
Check seats, seat belts and floor mats	OK
Check tractor hand valve	N/A
Check power divider shift operation	OK
Check fifth wheel slider air lock operation	N/A

TASK	STATUS
Check brake lining thickness	
	

UNDER HOOD OR RAISED CAB INSPECTION	
Check radiator, fan drive, and shroud	OK
Pressure test cooling system	
Test DCA, extended life and freeze protection	OK
Check belts - visual inspection for wear and tension	OK
Check hoses - condition and/or leaks	OK
Check hose and wire routing, securing	OK
Check exhaust - mounting, clamping and evidence of leaks	OK
Check air cleaner restriction gauge	OK
Check air cleaner housing, air-to-air piping and clamping	OK
Check alternator - visual inspection	OK
Check wiper blade condition	ok
Check starting system - visual inspection	OK
Check Steering shaft, U-joints, box mounting, pitman arm, drag link	OK
Check power steering fluid level	OK
Check master cylinder fluid level	N/A
Top off windshield washer fluid	ok
Drain water from fuel water separator	OK
Change fuel filter (engine mounted, include prescreen if equipped)	—
Change fuel water separator	—
Change water filter	—

PART LIST

DESCRIPTION	PART # (CROSS REFERENCE)	JDE #
AIR FILTER	AF348M	
OIL FILTER	LF9080	
FUEL FILTER	FF5686	
ELEMENT FILTER BREATHER	CV50617	
FUEL/H2O SEPARATOR	K371004	
TRANSMISSION FILTER	29548988	
POWER STEERING FILTER	P550637	

LUBRICANT

COMPARTMENT	OIL TYPE	LITERS	JDE #

Note: Any feedback (recommendations/comments) will be greatly appreciated

Appendix B – Analysis Certificates

Your Project #: LEACHATE CELL
Site Location: MELIADINE

Attention:Reporting

Agnico-Eagle
Meliadine Mine
Rankin Inlet, NU
CANADA X0C 0G0

Report Date: 2016/10/17
Report #: R4213588
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B6L8802
Received: 2016/10/12, 10:30

Sample Matrix: Soil
Samples Received: 5

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Petroleum Hydro. CCME F1 & BTEX in Soil (1)	5	N/A	2016/10/14	OTT SOP-00002	CCME CWS
Petroleum Hydrocarbons F2-F4 in Soil (2)	5	2016/10/13	2016/10/15	OTT SOP-00001	CCME CWS
MOISTURE	5	N/A	2016/10/14	CAM SOP-00445	McKeague 2nd ed 1978

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) No lab extraction date is given for F1BTEX & VOC samples that are field preserved with methanol. Extraction date is the date sampled unless otherwise stated.
(2) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Maxxam conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Madison Bingley, Project Manager
Email: MBingley@maxxam.ca
Phone# (613)274-3549

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Job #: B6L8802
Report Date: 2016/10/17

Agnico-Eagle
Client Project #: LEACHATE CELL
Site Location: MELIADINE
Sampler Initials: AG

RESULTS OF ANALYSES OF SOIL

Maxxam ID		DFM538	DFM538	DFM539	DFM540	DFM541		
Sampling Date		2016/10/09 16:30	2016/10/09 16:30	2016/10/09 16:38	2016/10/09 16:47	2016/10/09 16:17		
	UNITS	NUNA TRENCH-1	NUNA TRENCH-1 Lab-Dup	NUNA TRENCH-2	NUNA TRENCH-3	NUNA TEST PIT	RDL	QC Batch
Inorganics								
Moisture	%	9.5	11	5.3	6.1	22	0.2	4699378

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Maxxam ID		DFM542		
Sampling Date		2016/10/09 16:24		
	UNITS	NUNA TEST TRENCH	RDL	QC Batch
Inorganics				
Moisture	%	12	0.2	4699378

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B6L8802
Report Date: 2016/10/17

Agnico-Eagle
Client Project #: LEACHATE CELL
Site Location: MELIADINE
Sampler Initials: AG

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		DFM538	DFM538	DFM539	DFM540	DFM541		
Sampling Date		2016/10/09 16:30	2016/10/09 16:30	2016/10/09 16:38	2016/10/09 16:47	2016/10/09 16:17		
	UNITS	NUNA TRENCH-1	NUNA TRENCH-1 Lab-Dup	NUNA TRENCH-2	NUNA TRENCH-3	NUNA TEST PIT	RDL	QC Batch
BTEX & F1 Hydrocarbons								
Benzene	ug/g	<0.0050		<0.0050	<0.0050	<0.0050	0.0050	4702195
Toluene	ug/g	<0.020		<0.020	<0.020	<0.020	0.020	4702195
Ethylbenzene	ug/g	<0.010		<0.010	<0.010	<0.010	0.010	4702195
o-Xylene	ug/g	<0.020		<0.020	<0.020	<0.020	0.020	4702195
p+m-Xylene	ug/g	<0.040		<0.040	<0.040	<0.040	0.040	4702195
Total Xylenes	ug/g	<0.040		<0.040	<0.040	<0.040	0.040	4702195
F1 (C6-C10)	ug/g	<10		<10	<10	<10	10	4702195
F1 (C6-C10) - BTEX	ug/g	<10		<10	<10	<10	10	4702195
F2-F4 Hydrocarbons								
F2 (C10-C16 Hydrocarbons)	ug/g	<10	<10	<10	<10	<10	10	4699380
F3 (C16-C34 Hydrocarbons)	ug/g	<50	<50	<50	<50	120	50	4699380
F4 (C34-C50 Hydrocarbons)	ug/g	<50	<50	<50	<50	<50	50	4699380
Reached Baseline at C50	ug/g	Yes	Yes	Yes	Yes	Yes		4699380
Surrogate Recovery (%)								
1,4-Difluorobenzene	%	91		90	91	90		4702195
4-Bromofluorobenzene	%	110		102	105	106		4702195
D10-Ethylbenzene	%	89		92	86	84		4702195
D4-1,2-Dichloroethane	%	98		97	100	101		4702195
o-Terphenyl	%	101	100	103	103	101		4699380

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

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Maxxam Job #: B6L8802
Report Date: 2016/10/17

Agnico-Eagle
Client Project #: LEACHATE CELL
Site Location: MELIADINE
Sampler Initials: AG

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		DFM542		
Sampling Date		2016/10/09 16:24		
	UNITS	NUNA TEST TRENCH	RDL	QC Batch
BTEX & F1 Hydrocarbons				
Benzene	ug/g	<0.0050	0.0050	4702195
Toluene	ug/g	<0.020	0.020	4702195
Ethylbenzene	ug/g	<0.010	0.010	4702195
o-Xylene	ug/g	<0.020	0.020	4702195
p+m-Xylene	ug/g	<0.040	0.040	4702195
Total Xylenes	ug/g	<0.040	0.040	4702195
F1 (C6-C10)	ug/g	<10	10	4702195
F1 (C6-C10) - BTEX	ug/g	<10	10	4702195
F2-F4 Hydrocarbons				
F2 (C10-C16 Hydrocarbons)	ug/g	<10	10	4699380
F3 (C16-C34 Hydrocarbons)	ug/g	<50	50	4699380
F4 (C34-C50 Hydrocarbons)	ug/g	<50	50	4699380
Reached Baseline at C50	ug/g	Yes		4699380
Surrogate Recovery (%)				
1,4-Difluorobenzene	%	94		4702195
4-Bromofluorobenzene	%	101		4702195
D10-Ethylbenzene	%	90		4702195
D4-1,2-Dichloroethane	%	102		4702195
o-Terphenyl	%	104		4699380

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B6L8802
Report Date: 2016/10/17

Agnico-Eagle
Client Project #: LEACHATE CELL
Site Location: MELIADINE
Sampler Initials: AG

TEST SUMMARY

Maxxam ID: DFM538
Sample ID: NUNA TRENCH-1
Matrix: Soil

Collected: 2016/10/09
Shipped:
Received: 2016/10/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	4702195	N/A	2016/10/14	Lyndsey Hart
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	4699380	2016/10/13	2016/10/15	Liliana Gaburici
MOISTURE	BAL	4699378	N/A	2016/10/14	Liliana Gaburici

Maxxam ID: DFM538 Dup
Sample ID: NUNA TRENCH-1
Matrix: Soil

Collected: 2016/10/09
Shipped:
Received: 2016/10/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	4699380	2016/10/13	2016/10/15	Liliana Gaburici
MOISTURE	BAL	4699378	N/A	2016/10/14	Liliana Gaburici

Maxxam ID: DFM539
Sample ID: NUNA TRENCH-2
Matrix: Soil

Collected: 2016/10/09
Shipped:
Received: 2016/10/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	4702195	N/A	2016/10/14	Lyndsey Hart
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	4699380	2016/10/13	2016/10/15	Liliana Gaburici
MOISTURE	BAL	4699378	N/A	2016/10/14	Liliana Gaburici

Maxxam ID: DFM540
Sample ID: NUNA TRENCH-3
Matrix: Soil

Collected: 2016/10/09
Shipped:
Received: 2016/10/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	4702195	N/A	2016/10/14	Lyndsey Hart
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	4699380	2016/10/13	2016/10/15	Liliana Gaburici
MOISTURE	BAL	4699378	N/A	2016/10/14	Liliana Gaburici

Maxxam ID: DFM541
Sample ID: NUNA TEST PIT
Matrix: Soil

Collected: 2016/10/09
Shipped:
Received: 2016/10/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	4702195	N/A	2016/10/14	Lyndsey Hart
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	4699380	2016/10/13	2016/10/15	Liliana Gaburici
MOISTURE	BAL	4699378	N/A	2016/10/14	Liliana Gaburici

Maxxam ID: DFM542
Sample ID: NUNA TEST TRENCH
Matrix: Soil

Collected: 2016/10/09
Shipped:
Received: 2016/10/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	4702195	N/A	2016/10/14	Lyndsey Hart

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Maxxam Job #: B6L8802
Report Date: 2016/10/17

Agnico-Eagle
Client Project #: LEACHATE CELL
Site Location: MELIADINE
Sampler Initials: AG

TEST SUMMARY

Maxxam ID: DFM542
Sample ID: NUNA TEST TRENCH
Matrix: Soil

Collected: 2016/10/09
Shipped:
Received: 2016/10/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	4699380	2016/10/13	2016/10/15	Liliana Gaburici
MOISTURE	BAL	4699378	N/A	2016/10/14	Liliana Gaburici

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Maxxam Job #: B6L8802
Report Date: 2016/10/17

Agnico-Eagle
Client Project #: LEACHATE CELL
Site Location: MELIADINE
Sampler Initials: AG

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	15.0°C

Results relate only to the items tested.

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Maxxam Job #: B6L8802
Report Date: 2016/10/17

QUALITY ASSURANCE REPORT

Agnico-Eagle
Client Project #: LEACHATE CELL
Site Location: MELIADINE
Sampler Initials: AG

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
4699380	o-Terphenyl	2016/10/15	101	30 - 130	92	30 - 130	98	%		
4702195	1,4-Difluorobenzene	2016/10/14	99	60 - 140	99	60 - 140	91	%		
4702195	4-Bromofluorobenzene	2016/10/14	118	60 - 140	113	60 - 140	105	%		
4702195	D10-Ethylbenzene	2016/10/14	91	30 - 130	99	30 - 130	100	%		
4702195	D4-1,2-Dichloroethane	2016/10/14	106	60 - 140	107	60 - 140	100	%		
4699378	Moisture	2016/10/14							14	50
4699380	F2 (C10-C16 Hydrocarbons)	2016/10/15	101	50 - 130	91	80 - 120	<10	ug/g	NC	50
4699380	F3 (C16-C34 Hydrocarbons)	2016/10/15	101	50 - 130	91	80 - 120	<50	ug/g	NC	50
4699380	F4 (C34-C50 Hydrocarbons)	2016/10/15	101	50 - 130	91	80 - 120	<50	ug/g	NC	50
4702195	Benzene	2016/10/14	95	60 - 140	98	60 - 140	<0.0050	ug/g	NC	50
4702195	Ethylbenzene	2016/10/14	112	60 - 140	109	60 - 140	<0.010	ug/g	NC	50
4702195	F1 (C6-C10) - BTEX	2016/10/14					<10	ug/g	NC	50
4702195	F1 (C6-C10)	2016/10/14	97	60 - 140	99	80 - 120	<10	ug/g	NC	50
4702195	o-Xylene	2016/10/14	118	60 - 140	115	60 - 140	<0.020	ug/g	NC	50
4702195	p+m-Xylene	2016/10/14	113	60 - 140	110	60 - 140	<0.040	ug/g	NC	50
4702195	Toluene	2016/10/14	102	60 - 140	99	60 - 140	<0.020	ug/g	NC	50
4702195	Total Xylenes	2016/10/14					<0.040	ug/g	NC	50

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (one or both samples < 5x RDL).

Maxxam Analytics International Corporation o/a Maxxam Analytics 32 Colonnade Rd, Unit #1000, Nepean, ON K2E 7J6 Phone: 613 274-0573 Fax: 613 274-0574 Website: www.maxxam.ca

Maxxam Job #: B6L8802
Report Date: 2016/10/17

Agnico-Eagle
Client Project #: LEACHATE CELL
Site Location: MELIADINE
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Steve Roberts, Ottawa Lab Manager

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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Maxxam 6740 Campobello Road, Mississauga, ON L5N 2L8
Phone: 905-817-5700 Fax: 905-817-5779 Toll Free: (800) 563-6266

CHAIN OF CUSTODY RECORD

Page ____ of ____

INVOICE INFORMATION:	REPORT INFORMATION (if differs from invoice):	PROJECT INFORMATION:	MAXXAM JOB NUMBER:
Company Name: AGNICO-EAGLE	Company Name:	Quotation #:	12-Oct-16 10:30 Madison Bingley B6L8802
Contact Name: Jeffrey Pratt	Contact Name:	P.O. #:	
Address: RANKIN INLET, NU, CAN, X0C 0G0	Address:	Project #: leachate cell	
Phone: Fax:	Phone: Fax:	Site Location: meliadine	
Email: meli.environment@agnicoeagle.com	Email:	Site #:	
		Sampled By: AG	FHB OTT-002

Note: For MOE Regulated Drinking Water samples, please use the Drinking Water COC.

Regulation 153 (2011)

- [ ] Table 1 [ ] Res/Park [ ] Med/Fine
- [ ] Table 2 [ ] Ind/Comm [ ] Coarse
- [ ] Table 3 [ ] Agri/Other
- [ ] Table ___

For RSC: [ ] Yes [ ] No

Other Regulations

- [x] CCME [ ] Sanitary Sewer Bylaw
- [ ] Reg 558 [ ] Storm Sewer Bylaw
- [ ] MISA
- [ ] PWQO Municipality:
- [ ] Other (Specify):

Include Criteria on Certificate of Analysis (Y/N)? ____

SAMPLES MUST BE KEPT COOL (< 10 °C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

	Sample Identification	Date Sampled	Time Sampled	Matrix (GW, SW, Soil, etc.)	MOE Regulated Drinking Water ? (Y / N)	Metals & Mercury Field Filtered ? (Y / N)	Benzen	Toluen	Ethylbenzene	Xylene	PHC Fraction 1	PHC Fraction 2	PHC Fraction 3	PHC Fraction 4	# of Cont.	COMMENTS / TAT COMMENTS
1	Nuna Trench-1	2016/10/09	16h30	Soil	N	N	x	x	x	x	x	x	x	x	3	
2	Nuna Trench-2	2016/10/09	16h38	Soil	N	N	x	x	x	x	x	x	x	x	3	
3	Nuna Trench-3	2016/10/09	16h47	Soil	N	N	x	x	x	x	x	x	x	x	3	
4	Nuna Test Pit	2016/10/09	16h17	Soil	N	N	x	x	x	x	x	x	x	x	3	
5	Nuna Test Trench	2016/10/09	16h24	Soil	N	N	x	x	x	x	x	x	x	x	3	

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: [x]
(5-7 working days for most tests)

Rush TAT:
Samples must be received by 3pm to guarantee your TAT
Rush Confirmation #: PN
[ ] 1 day [ ] 2 days [ ] 3 days
DATE Req'd:

TAT for certain tests are > 5 days.
Please contact your Project Manager for details.

RELINQUISHED BY: (Signature/Print)	Date (YYYY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date (YYYY/MM/DD)	Time:
Alexandre Gauthier	2016/10/10	7:00	Fatemeh Habib	2016/10/12	10:30

JARS USED AND NOT SUBMITTED

Laboratory Use Only

Custody Seal	Yes	No	Temperature (°C) on Receipt
Present		✓	15, 11, 19
Intact			

MANDATORY SECTIONS IN GREY MUST BE FILLED OUT. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS

Maxxam Analytics International Corporation o/a Maxxam Analytics

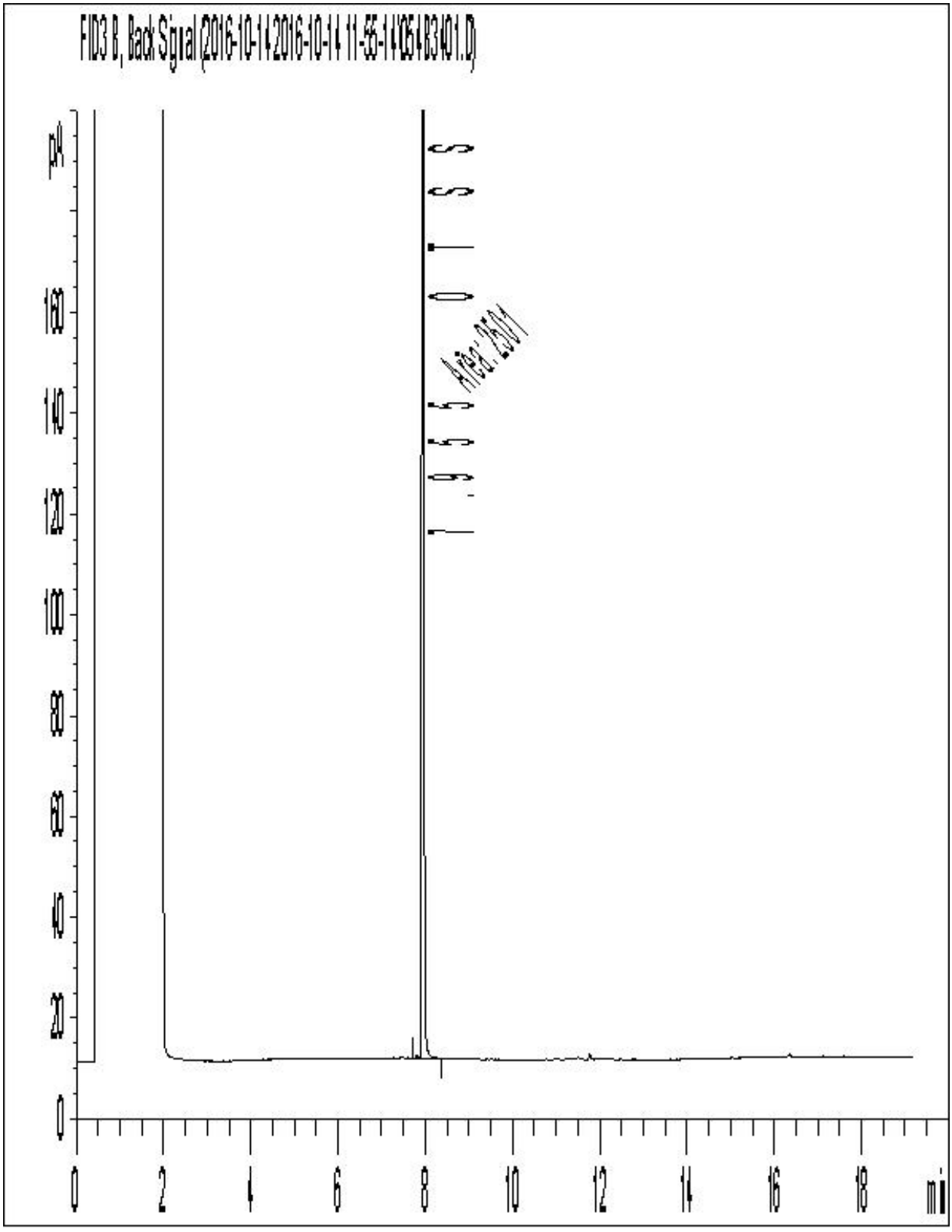
NO ICE.

RECEIVED IN OTTAWA

Maxxam Job #: B6L8802
Report Date: 2016/10/17
Maxxam Sample: DFM538

Agnico-Eagle
Client Project #: LEACHATE CELL
Project name: MELIADINE
Client ID: NUNA TRENCH-1

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

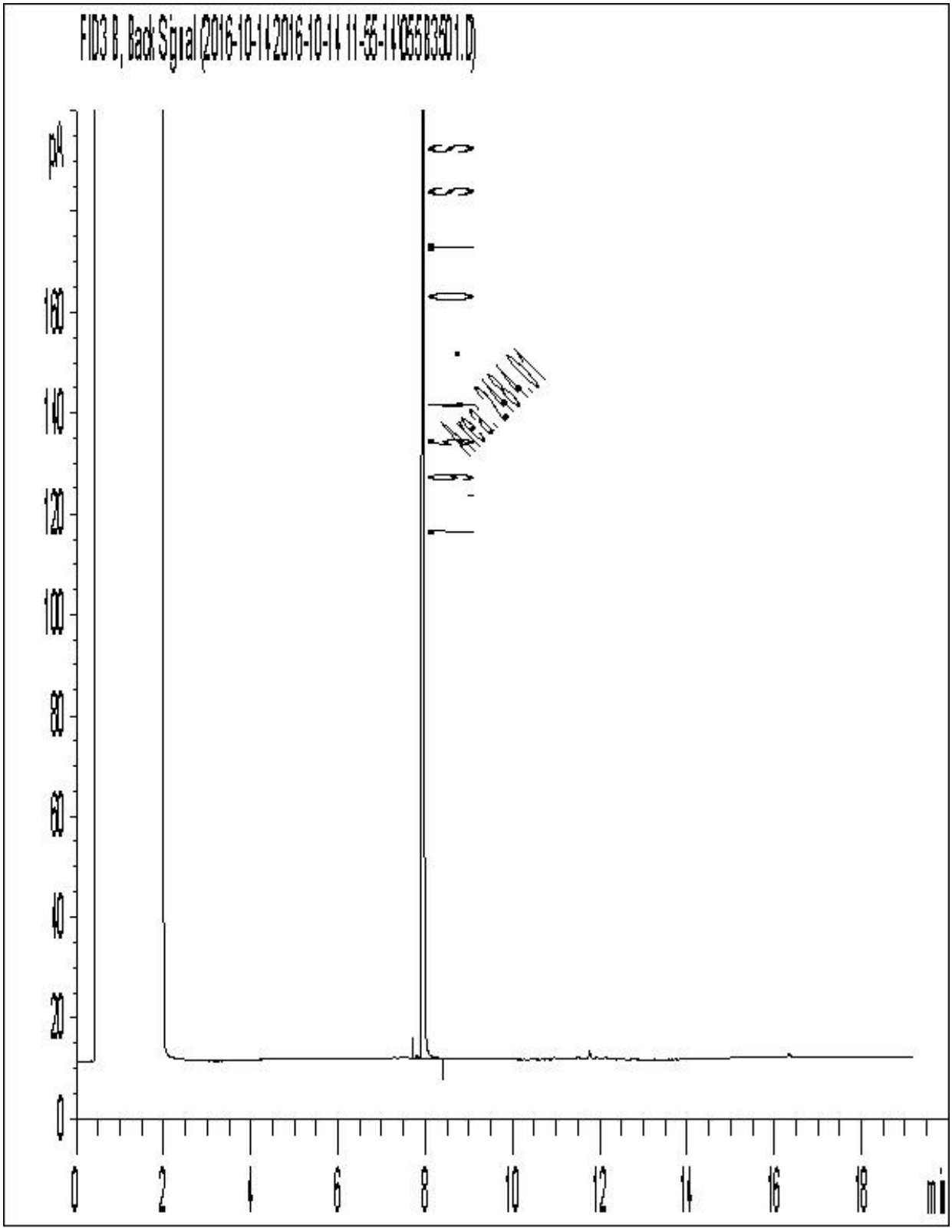


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Maxxam Job #: B6L8802
Report Date: 2016/10/17
Maxxam Sample: DFM538 Lab-Dup

Agnico-Eagle
Client Project #: LEACHATE CELL
Project name: MELIADINE
Client ID: NUNA TRENCH-1

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

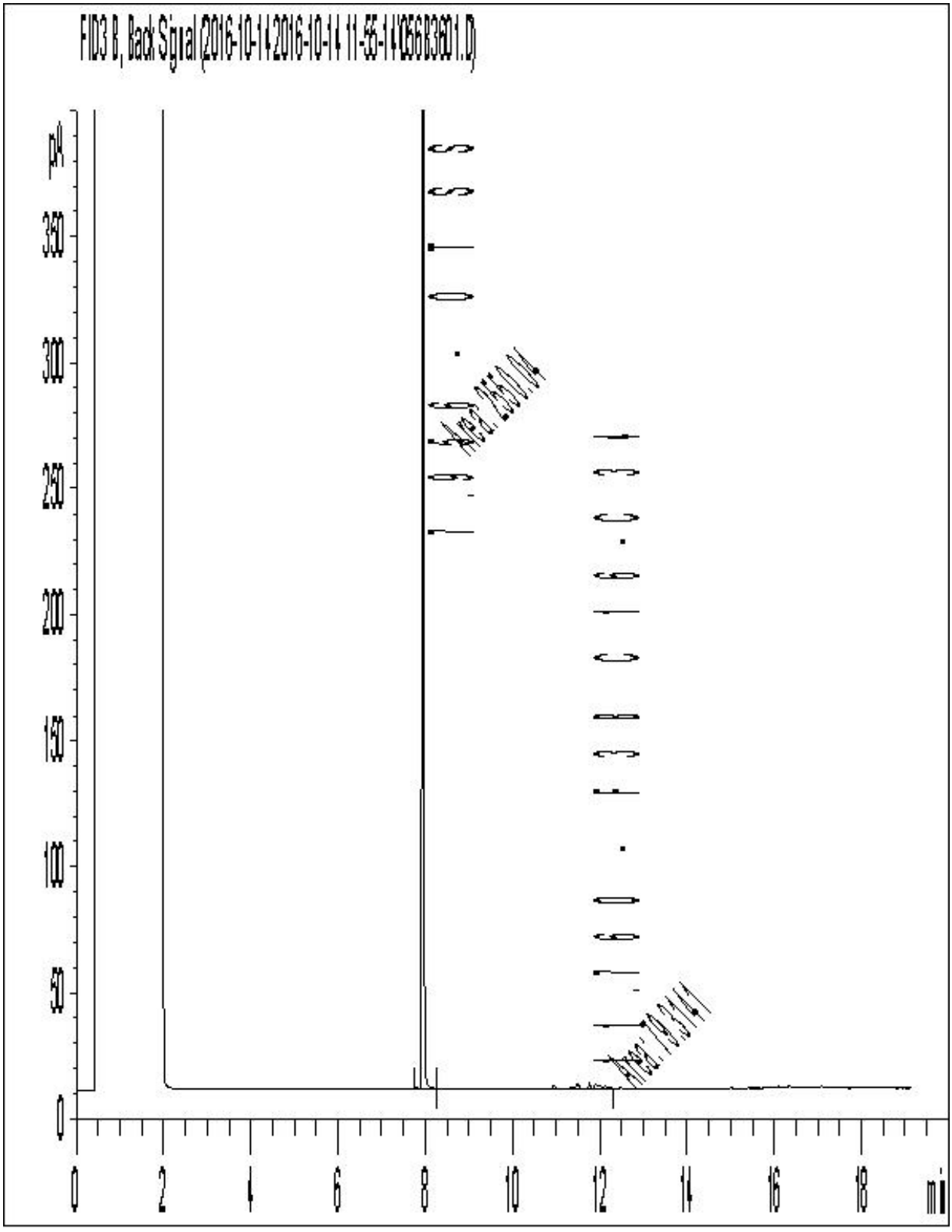


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Maxxam Job #: B6L8802
Report Date: 2016/10/17
Maxxam Sample: DFM539

Agnico-Eagle
Client Project #: LEACHATE CELL
Project name: MELIADINE
Client ID: NUNA TRENCH-2

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

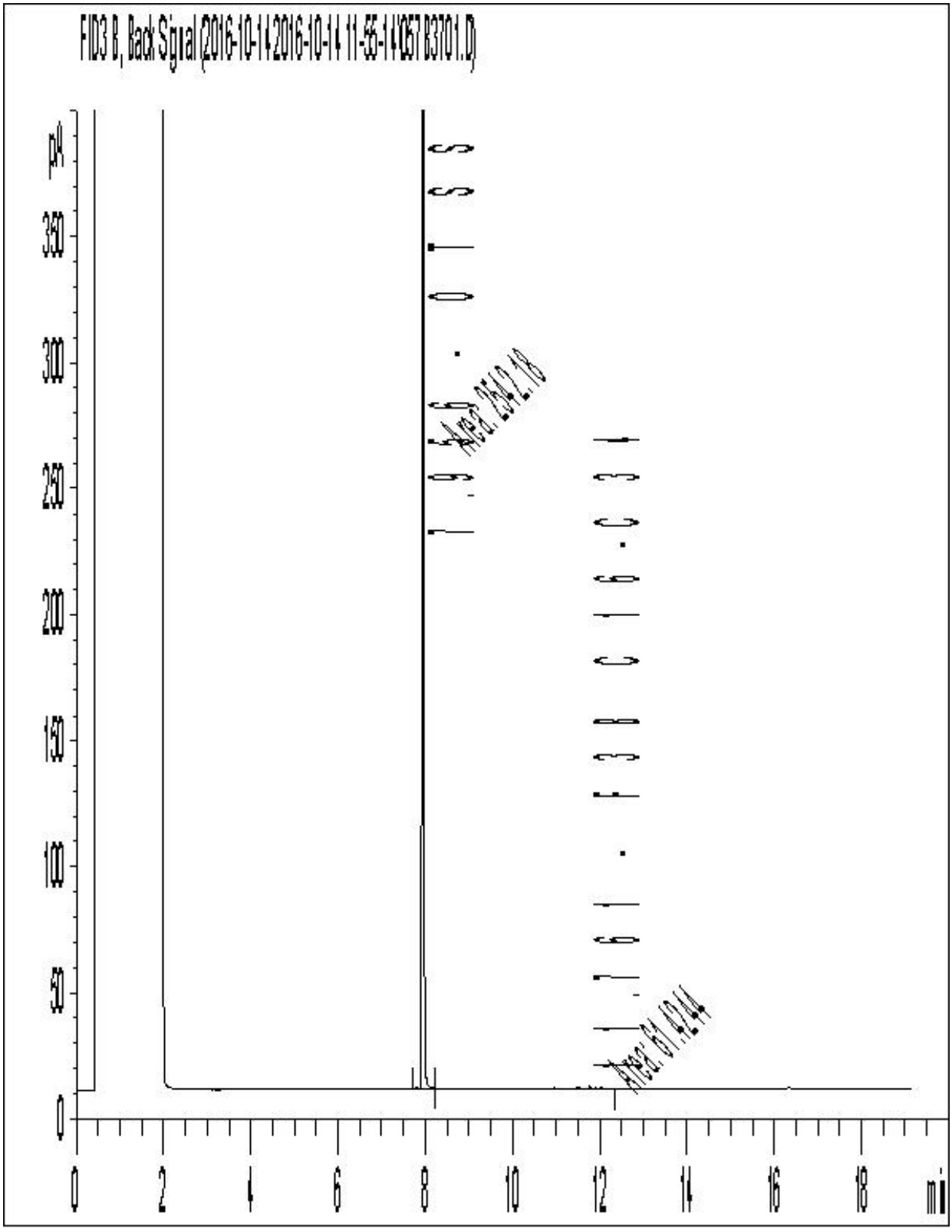


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Maxxam Job #: B6L8802
Report Date: 2016/10/17
Maxxam Sample: DFM540

Agnico-Eagle
Client Project #: LEACHATE CELL
Project name: MELIADINE
Client ID: NUNA TRENCH-3

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

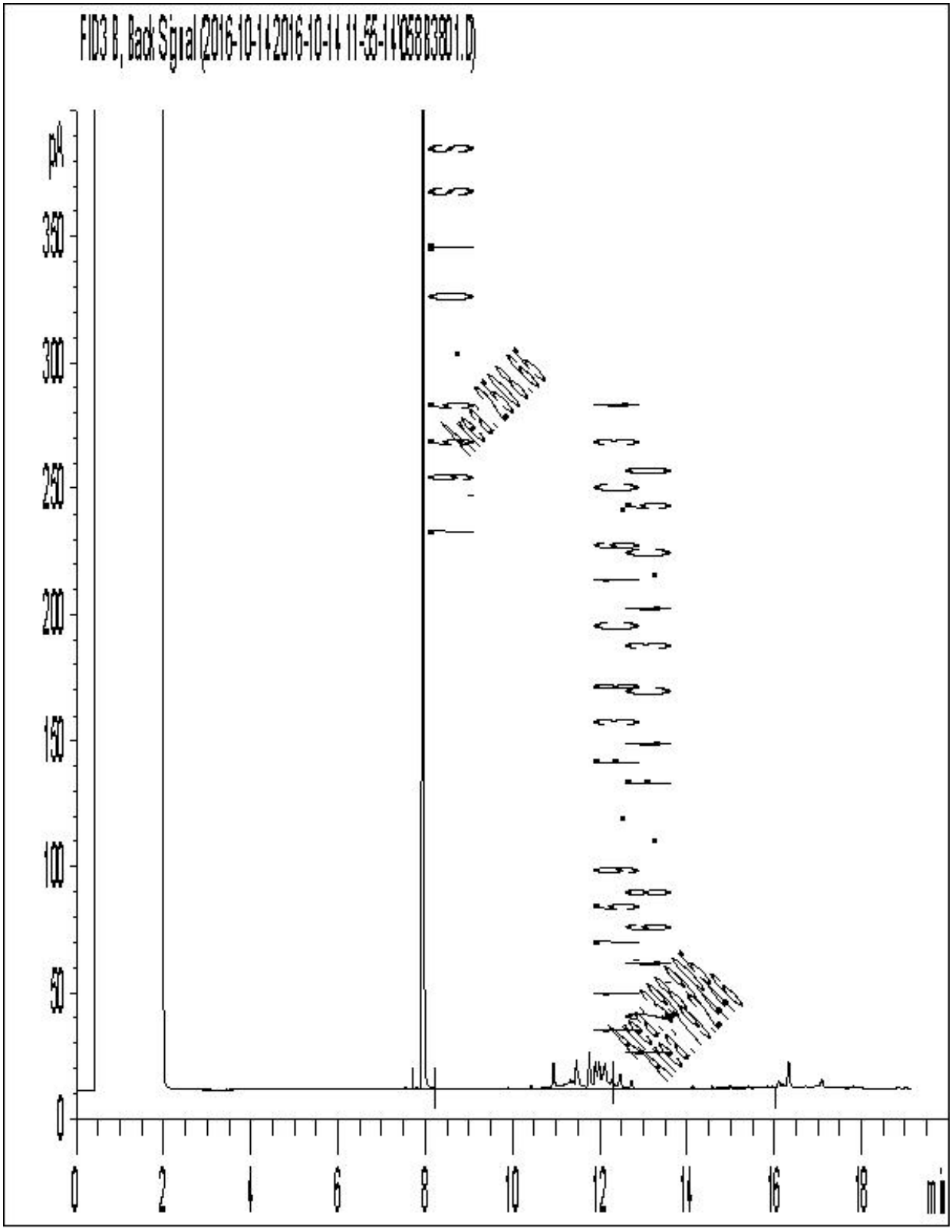


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Maxxam Job #: B6L8802
Report Date: 2016/10/17
Maxxam Sample: DFM541

Agnico-Eagle
Client Project #: LEACHATE CELL
Project name: MELIADINE
Client ID: NUNA TEST PIT

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

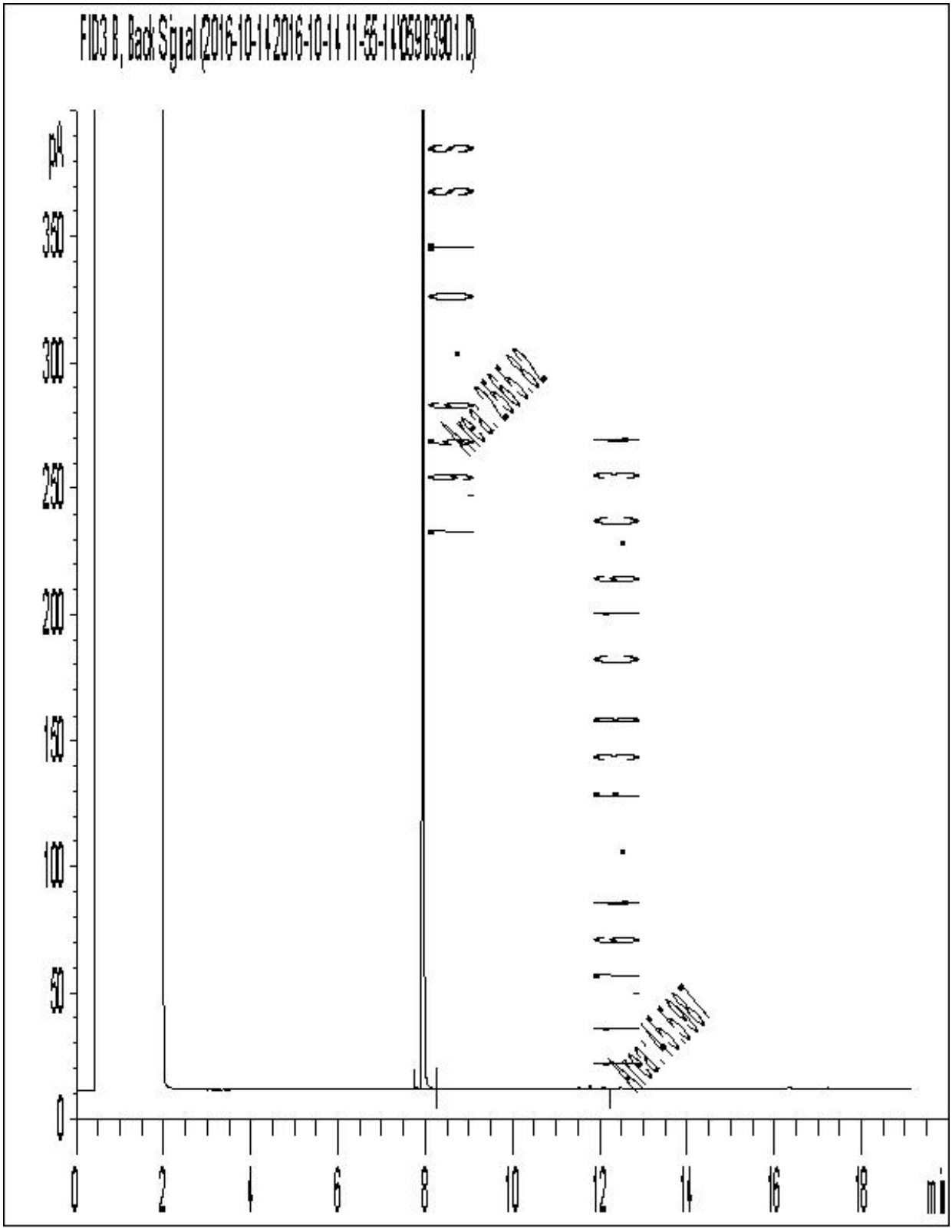


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Maxxam Job #: B6L8802
Report Date: 2016/10/17
Maxxam Sample: DFM542

Agnico-Eagle
Client Project #: LEACHATE CELL
Project name: MELIADINE
Client ID: NUNA TEST TRENCH

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.